Shatt et al. Attorney's Docket No.: 13906-0123001 / 2003P00283 US01

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

 (Currently Amended) A computer-implemented method of providing object-based content to be reported in an external computer-implemented general reporting application, the method comprising:

providing an electronic storage repository of business database objects from which object instances are able to be generated, which business database objects each have one or more attributes for which applicable data are able to be provided for a generated object instance;

receiving, in a data processing system comprising at least one computer, a user selection of one of the business database objects, wherein generated instances of the selected object have data for attributes of the object:

displaying on a display device a view that includes: i) the selected business database object in a first portion of the view, ii) at least some of the attributes associated with the selected business database object in a second portion of the view, iii) a plurality of business objects each having associated attributes, wherein each of the business objects has a defined relationship to the selected business database object in a third portion of the view, and iv) at least some of the attributes for the plurality of related business objects in a fourth portion of the view;

receiving in the data processing system a user selection of at least one of the displayed one or more attributes associated with the selected business database object, and a user selection of at least one of the displayed attributes for the plurality of related business objects, and adding the selected attributes to an electronic business content structure of selected attributes;

defining a report layout using the electronic business content structure and the selected attributes, wherein the report layout defines the structure of one or more reports;

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executing a query of records in an electronic database and retrieving, for each of the records that meet the query, attribute data for each of the attributes in the electronic business content structure: and

generating, in the data processing system <u>and before reporting run-time</u>, an output electronic file that the external computer-implemented reporting application can use to generate a report, the report to include the electronic business content structure and the attribute data associated therewith, <u>and to be structured according to the report layout</u>;

determining, at the reporting run-time, one of a plurality of external computerimplemented reporting applications for use in generating the report; and

launching the determined reporting application using the output electronic file and generating the report in the determined reporting application according to the previously defined report layout.

- (Previously Presented) The method of claim 1 wherein a business content design wizard assists in defining the electronic business content structure.
- (Previously Presented) The method of claim 1 wherein the electronic business content structure represents meta-data information.
- 4. (Previously Presented) The method of claim 1 further comprising displaying on the display device a view of a plurality of electronic business content structures and receiving a user selection of one of the electronic business content structures to be included in a report.
 - (Canceled)
 - (Canceled)
 - (Canceled)

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(Canceled)

- 9. (Previously Presented) The method of claim 1 further comprising defining a calculated field to be included in the electronic business content structure, wherein the calculated field is associated with a function that takes one or more business object attributes as input, and uses a formula to compute a resultant value for the calculated field based on the input.
- (Previously Presented) The method of claim 9 wherein the electronic business content structure represents meta-data information.
- (Previously Presented) The method of claim 9 wherein the resultant value is included in the output electronic file.
- 12. (Previously Presented) The method of claim 1 further comprising persistently storing the electronic business content structure in an electronic database.
- 13. (Previously Presented) The method of claim 12 wherein the electronic business content structure is stored as an XML document in the electronic database, and wherein the electronic business content structure attributes correspond to tags in the XML document.

14. (Canceled)

- (Previously Presented) The method of claim 1 wherein the database query is an SQL query that uses the concept of derived tables.
- (Previously Presented) The method of claim 1 wherein the output electronic file is an ActiveX Data Object Recordset.

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17. (Previously Presented) The method of claim 1 wherein generating the output electronic file that the external computer-implemented reporting application can use to generate the report further comprises transferring the output electronic file to a reporting-tool-specific interface component capable of plug-and-play interaction with the external computer-implemented reporting application.

18. (Currently Amended) A computer-implemented method of providing object-based content to be reported in an external computer-implemented general reporting application, the method comprising:

receiving, in a data processing system comprising at least one computer, a user selection of a business database object having associated attributes, wherein generated instances of the selected object have data for the associated attributes;

displaying on a display device a view that includes: i) the selected business database object in a first portion of the view, ii) at least some of the attributes associated with the selected business database object in a second portion of the view, iii) a plurality of business objects each having associated attributes, wherein each of the business objects has a defined relationship to the selected business database object in a third portion of the view, and iv) at least some of the attributes for the plurality of related business objects in a fourth portion of the view;

receiving in the data processing system a user selection of at least one of the displayed attributes associated with the selected business database object, and a user selection of at least one of the displayed attributes for the plurality of related business objects, and adding the selected attributes to an electronic business content structure of selected attributes; and

persistently storing the electronic business content structure in an electronic database so that it can later be retrieved and used to generate, <u>before reporting run-time</u>, an output file that the external computer-implemented general reporting application can use to generate a report with current data; and

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defining a report layout using the electronic business content structure and the selected attributes, wherein the report layout defines the structure of one or more reports.

19. (Currently Amended) Computer-readable medium with program instructions stored thereon that when executed perform the following functions for providing object-based content to be reported in an external computer-implemented general reporting application:

provides an electronic storage repository of business database objects from which object instances are able to be generated, which business database objects each have one or more attributes for which applicable data are able to be provided for a generated object instance;

receives, in a data processing system comprising at least one computer, a user selection of one of the business database objects, wherein generated instances of the selected object have data for attributes of the object;

displays on a display device a view that includes: i) the selected business database object in a first portion of the view, ii) at least some of the attributes associated with the selected business database object in a second portion of the view, iii) a plurality of business objects each having associated attributes, wherein each of the business objects has a defined relationship to the selected business database object in a third portion of the view, and iv) at least some of the attributes for the plurality of related business objects in a fourth portion of the view;

receives in the data processing system a user selection of at least one of the displayed one or more attributes associated with the selected business database object, and a user selection of at least one of the displayed attributes for the plurality of related business objects, and adding the selected attributes to an electronic business content structure of selected attributes;

defines a report layout using the electronic business content structure and the selected attributes, wherein the report layout defines the structure of one or more reports;

executes a query of records in an electronic database and retrieves, for each of the records that meet the query, attribute data for each of the attributes in the electronic business content structure; and

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generates, in the data processing system and before reporting run-time, an output electronic file that the external computer-implemented reporting application can use to generate a report, the report to include the electronic business content structure and the attribute data associated therewith, and to be structured according to the report layout;

determines, at the reporting run-time, one of a plurality of external computerimplemented reporting applications for use in generating the report; and

launches the determined reporting application using the output electronic file and generates the report in the determined reporting application according to the previously defined report layout.

- (Previously Presented) The medium of claim 19 wherein a business content design wizard assists in defining the electronic business content structure.
- (Previously Presented) The medium of claim 19 wherein the electronic business content structure represents meta-data information.
- 22. (Previously Presented) The medium of claim 19 further comprising instructions that when executed displays on the display device a view of a plurality of electronic business content structures and receives a user selection of one of the electronic business content structures to be included in a report.
 - (Canceled)
 - 24. (Canceled)
 - (Canceled)
 - 26. (Canceled)

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27. (Previously Presented) The medium of claim 19 further comprising instructions that when executed defines a calculated field to be included in the electronic business content structure, wherein the calculated field is associated with a function that takes one or more business object attributes as input, and uses a formula to compute a resultant value for the

calculated field based on the input.

28. (Previously Presented) The medium of claim 27 wherein the electronic business

content structure represents meta-data information.

29. (Previously Presented) The medium of claim 27 wherein the resultant value is

included in the output electronic file.

(Previously Presented) The medium of claim 19 further comprising instructions
that when executed persistently stores the electronic business content structure in an electronic

database

31. (Previously Presented) The medium of claim 30 wherein the electronic business

content structure is stored as an XML document in the electronic database, and wherein the electronic business content structure attributes correspond to tags in the XML document.

(Canceled)

33. (Previously Presented) The medium of claim 19 wherein the database query is an

SQL query that uses the concept of derived tables.

34. (Previously Presented) The medium of claim 19 wherein the output electronic file

is an ActiveX Data Object Recordset.

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35. (Previously Presented) The medium of claim 19 wherein generating the output electronic file that the external computer-implemented reporting application can use to generate the report further comprises transferring the output electronic file to a reporting-tool-specific interface component capable of plug-and-play interaction with the external computer-implemented reporting application.

- (Previously Presented) The method of claim 1, further comprising displaying a
 pictorial representation of the selected business database object and one or more of the related
 business objects.
- (Previously Presented) The medium of claim 19, further comprising instructions
 that when executed display a pictorial representation of the selected business database object and
 one or more of the related business objects.